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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,404	09/11/2003	Robert Silva	IGT1P060X2/P-568-CIP2	6650

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EXAMINER	
LEIVA, FRANK M	

ART UNIT	PAPER NUMBER
3714	

MAIL DATE	DELIVERY MODE
05/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/661,404	SILVA ET AL.	
	Examiner	Art Unit	
	FRANK M. LEIVA	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16,41 and 42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16,41 and 42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/27/2009; 03/12/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08 January 2009 has been entered.

Acknowledgements

2. The examiner acknowledges remarks filed 08 January 2009 with no claims filed. This examination will be done on to the claims amendments filed 04 November 2008, wherein claims 1 and 3 have been amended and claims 2, 17-40 and 43-48 have been canceled. Claims remaining 1, 3-16 and 41-42.

Response to Arguments

3. Applicant's arguments, see Remarks, filed 08 January 2009, with respect to the rejection(s) of claim(s) 1, 3-16 and 41-42 under U.S.C. §102(e) over Cole, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Awater et al. (US 2001/0010689 A1).

4. Applicant's argument directed to the rejections of claims 3-14 and 41; in regards to the Lazzarotto reference, the argument is found not persuasive. The argument, "*But there is no motivation or need to communicate further with a wireless communications manager (a different component from the peripheral interface or peripheral manager) that is executed by a master gaming controller. There is simply too much modification to both the systems of Cole and Lazzarotto to arrive at the present invention without any teaching in this art that there is a need to do this*", assumes that components of communication can be connected directly to a

CPU/MPU directly and that a CPU/MPU would be able to operate its functions and communicate to peripherals, where for one of ordinary skill in the art it is known that device drivers and controllers are used to control the flow of data between peripheral and CPU. These drivers and controllers are also known as communication managers or administrators and are known to be required for any communication that is not part of the internal address and data bus circuit of the CPU or MPU. As is apparent by the diagrams of Cole, Lazzarotto and Awater. These drivers are necessary according to the method of communication and if an RS-232 (proprietary example) cable link is substituted by a BlueTooth link, the appropriate drivers connectors and resources to achieve this substitution will be inherent to the substitution and need not mention.
For the affront mentioned motivation, the Awater reference added to this action states to needs for using wireless short range communication links within the infrastructure of a computer system, the constitute a computer (game controller), a printer (ticket printer), keyboard (buttons) and mouse (touchscreen), all components of an average Casino Slot machine or Video Slot machine.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 15, 16 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al (US 2004/0137978 A1), in view of Awater et al. (US 2001/0010689 A1).

7. Regarding the combination of analogous art; Cole discloses a gaming system comprised of 2 gaming machines combined into a single housing and sharing the use of

the peripherals such as printer and bill validator, and using wireless communication to communicate to the network; Awater discloses the use of BlueTooth wireless communication to communicate a controller to its peripherals by substituting internal cable wirings with and intranet wireless system. Both systems teach about a controller and its connection to the peripherals.

8. **Regarding claim 1;** Cole discloses a gaming machine housing; a master gaming controller adapted for executing a game of chance played on the gaming machine and communicating with one or more peripheral devices used to play the game of chance, wherein the one or more peripheral devices are mounted within the gaming machine housing, (fig. 1 and ¶ [0119-0120]). Cole uses wireless communication to exchange information via an external network, and fails to mention that the internal communications between its peripherals can be made with wireless links. Awater discloses the use of the well-known Bluetooth (wireless) communication protocols as a substitute for proprietary cables being used to communicate from the controllers to the peripherals and wherein the master controller (gaming) comprises: a wireless communication manager executed by the master gaming controller adapted for managing wireless communications between (i) the master gaming controller and the peripheral devices, (ii) the peripheral devices, (fig. 6, ¶ [0008] and [0095]), as is understood that no CPU communicates directly with peripherals without the aid of a driver circuit, the BlueTooth link controller serves the same function as would the USB or UART interfaces. Because both Cole and Awater teach methods of a controller connecting to multiple peripherals in an intranet or internal network, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to substitute the method of Cole for the method of Awater to achieve the predictable result of having the peripherals of the gaming machine in Cole connected via BlueTooth (wireless) network.

9. **Regarding claim 15;** Cole discloses wherein wireless communications between the master gaming controller and peripheral devices and between peripheral devices are

confined within the gaming machine housing, (fig. 1), all peripherals are within the same housing.

10. Regarding claim 16; Cole discloses wherein wireless communications within the gaming machine are transmitted with a limited strength, range, or a combination thereof, in order to reduce cross-communication with devices external to the gaming machine, (¶[0100]), the use of infrared communication is introduced in Cole's disclosure which inherently comes with a short range.

11. Regarding claim 42; Cole discloses wherein the one or more peripheral devices include a player-tracking unit, (¶0030]).

12. Claims 3-14 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole and Awater as applied above and in view of Lazzarotto et al. (US 6,782,194), herein after Lazzarotto.

13. Regarding the combination of analogous art; Cole/Awater as applied above discloses a gaming machine that uses BlueTooth (wireless) link to communicate with its peripherals; Lazzarotto discloses peripheral interface systems a better description of the internal protocols. Both Cole/Awater and Lazzarotto teach about controller and peripheral links.

14. Regarding claim 3; Cole and Awater disclose all the limitations of claim 1 from which claim 3 depends on, yet are silent to the specifics of the wireless link; where Lazzarotto discloses wherein the wireless communication manager is adapted to configure the peripheral controller by assigning a communication identification key to the peripheral device associated with the peripheral controller, (fig. 1 and col. 3:17-31), where it shows that the invention is capable to communicate with several devices and translate USB signal which contains an identifying protocol for the controller to differentiate the message sender. Cole/Awater does not teach applying the technique of assigning identifier keys. Lazzarotto teaches a system of transforming USB communication into BlueTooth wireless

communication that since USB protocols demand an identifier, inherently the BlueTooth protocol will need to transmit such identifier. Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of identifying devices through the code as taught in Lazzarotto, to improve the communications of Cole/Awater for the predictable result of communicating wirelessly with the peripherals and being able to differentiate the device messages as they are exchanged.

15. Regarding claim 4; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 3 from which claim 4 depends on and Lazzarotto further discloses wherein assigning a communication identification key includes assigning a global unique identifier to the peripheral device, wherein the global unique identifier is used to wirelessly communicate to and from the peripheral device, (fig. 1), as stated with claim 3 rejection in order to communicate to the unit the identifier must be unique to the device otherwise the communications get confuse.

16. Regarding claim 5; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 3 from which claim 5 depends on and Lazzarotto further discloses wherein assigning a communication identification key includes assigning a frequency range to the peripheral device, wherein the frequency range is used to wirelessly communicate to and from the peripheral device, (5:19-33).

17. Regarding claim 6; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 3 from which claim 6 depends on and Lazzarotto further discloses wherein assigning a communication identification key includes providing a frequency hopping algorithm to the peripheral device, wherein the frequency hopping algorithm temporally assigns different frequency ranges within which to communicate to and from the peripheral device, (5:19-33), Delay modulation encoding algorithm is a frequency changing (or hopping) algorithm.

18. Regarding claim 7; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 3 from which claim 7 depends on and Lazzarotto further discloses wherein assigning a communication identification key includes assigning a formatting protocol to the peripheral device, wherein different formatting protocols are assigned to different devices within the gaming machine, and wherein the formatting protocol allows the peripheral device to filter out wireless communications intended for other devices, (2:56-67).

19. Regarding claim 8; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 3 from which claim 8 depends on and Lazzarotto further discloses wherein assigning a communication identification key includes providing a spread spectrum to the peripheral device, wherein the spread spectrum provides information allowing the peripheral device to reassemble packets received from the master gaming controller or another peripheral device, packetize communications to send to the master gaming controller or another peripheral device, or combinations thereof, (3:13-15).

20. Regarding claim 9; Cole/Awater discloses all the limitations of claim 1 from which claim 9 depends on, yet are silent to the specifics of the wireless link; where Lazzarotto discloses an internal network manager adapted for managing an internal wireless network implemented in the gaming machine, (2:56-67), the host being a USB driver or manager programmed to direct multiple communications from peripherals. Cole/Awater does not teach applying the technique of using a network manager. Lazzarotto teaches a system of transforming USB communication into BlueTooth wireless communication that since USB protocols require a driver/manager for the network, inherently the BlueTooth protocol will need to transmit such a manager. Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of using a manager to control communications as taught in Lazzarotto, to improve the communications of Cole/Awater for the predictable result of communicating wirelessly with the peripherals and being able to control or manage the traffic of messages sent back and fort to and from the multiple peripheral devices and the gaming controller.

21. Regarding claim 10; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 9 from which claim 10 depends on and Lazzarotto further discloses wherein managing the internal wireless network includes counting a number of packets lost to determine a reliability rate, (6:44-54), checking for errors before formatting the signal is disclosed, it is inherent to test the capability of the system and rate of readability during development and design only, a final product does not require a design value such as capability rate, all designs are made to be capable, yet Lazzarotto does disclose testing for errors in receiving the packets.

22. Regarding claim 11; Cole/Awater and Lazzarotto disclose all the limitations of claims 1, 9 and 10 from which claim 11 depends on and Lazzarotto further discloses wherein the number of packets lost includes packets for which no acknowledgement was received, packets that were corrupted, or a combination thereof, (6:44-54), as mentioned above in claim 10, Lazzarotto looks for the corrupted communications.

23. Regarding claim 12; Cole/Awater and Lazzarotto disclose all the limitations of claims 1, 9 and 10 from which claim 12 depends on and Lazzarotto further discloses wherein managing further includes adjusting the internal wireless network if the reliability rate exceeds a desired level, self adjusting optimization algorithms for (DSP) Digital Signal Processing are well known in the art.

24. Regarding claim 13; Cole/Awater and Lazzarotto disclose all the limitations of claims 1 and 9 from which claim 13 depends on and Lazzarotto further discloses wherein managing the internal wireless network includes monitoring different frequency channels, (8:1-5).

25. Regarding claim 14; Cole/Awater disclose all the limitations of claim 1 from which claim 14 depends on, yet are silent to the specifics of the wireless link; where Lazzarotto discloses wherein at least one of the one or more peripheral devices includes a

programmable interface, wherein the programmable interface allows interchangeability of the peripheral device within the gaming machine, (2:11-31). Cole/Awater does not teach applying the technique of assigning identifier keys. Lazzarotto teaches a system of transforming USB communication into BlueTooth wireless communication that employs a programmed driver. Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of using a programmed driver circuit as taught in Lazzarotto, to improve the communications of Cole/Awater for the predictable result of communicating wirelessly with the peripherals and being able to interface with the devices.

26. Regarding claim 41; Cole/Awater disclose all the limitations of claim 1 from which claim 41 depends on, yet are silent to the specifics of the wireless link; where Lazzarotto discloses wherein the master gaming controller and the one or more peripheral devices communicate using a wireless communication protocol selected from the group consisting of Bluetooth, IEEE 802.1 Ia, IEEE 802.1 Ib, IEEE 802.1 Ix, hiperlan/2, and HomeRF, (12:16-26). Cole/Awater does not teach applying the techniques or mention the plurality of existing protocols. Lazzarotto teaches a system of transforming USB communication into BlueTooth wireless communication that inherently includes these protocols. Thus, it would have been obvious to one of ordinary skill in the art to apply the technique of using existing protocols as taught in Lazzarotto, to improve the communications of Cole/Awater for the predictable result of communicating wirelessly with the peripherals and being able to interface with currently used protocols.

Citation of Prior Art

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Abdo et al. (US 2002/0080967 A1), shows the key encryption methods for wireless communications know at the time of applicant's invention as originally filed.

Examiner's notes

28. Note 1): The examiner has reviewed the priority claims of the application and would like to make it of record that the capability of a gaming controller to communicate with its peripherals wirelessly is not included in either of applications 09/921489 or 10/246373, both directed to the Player Tracking interface being able to communicate wirelessly with a wireless headset.

29. Note 2): Examiner has cited paragraphs and figures in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK M. LEIVA whose telephone number is (571)272-2460. The examiner can normally be reached on M-Th 9:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FML
05/16/2009

/Peter D. Vo/
Supervisory Patent Examiner, Art Unit 3714